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Setting the Scene: The Challenges of Universal Health Coverage and the Contribution of Management Education

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ABSTRACT

The last decades are being characterized by global trends such as population growth, aging, escalation of non communicable diseases and technological innovation. These unprecedented changes are moving faster than economic growth and threaten universal health coverage. What is at stake nowadays is governments' and healthcare systems' ability to renovate themselves and develop new paradigms aimed at finding innovative solutions to manage the new global forces so to maintain universal access to care in a changing environment. We have to be imaginative because if we keep relying on current paradigms to answer already too far-ahead complex problems, we will fail. And here education has a role to play. Although the recent years have seen a steep increase in the offerings of post-graduate management education programs in health and healthcare, the majority of these programs are still traditionally conceived and designed, aiming to train students to deal with specific, domestic, current problems. With the promise of making students the best specialists on Earth, to get the highest return on his or her investment in education, the performance of these programs is often measured in terms of earnings maximization. Although an indicator of success, this often incentivizes individuals to be context-based, individualistic, short-sighted and self-focused. Education has the greatest potential to foster imagination, to leverage diversity, to exploit teamworking and free creative thinking. Education can substantially contribute to anticipate the impact of global forces by but an endeavor is needed to design programs and measures performances differently.

Keywords: management education, universal health coverage.

The greatest danger for most of us is not that our aim is too high and we miss it, but that it is too low and we reach it.

Michelangelo

Universal health coverage has become the biggest hot-button issue for the international health community and the means for achieving universal health coverage, a major focus for all actors in the field.

As brilliantly put by Robinson [1], human affairs have always been turbulent but what is distinctive now is the rate and scale of change. The great driving forces are technological innovation, population growth, and ageing. Together they are transforming how we live and work. They are putting a vast strain on Earth's resources and changing the nature of politics, economics, and culture.

Technology is developing at a rate that most people cannot easily grasp. If digital technology has already left those older than 30 years behind compared with teenagers, the younger children are growing up with even more sophisticated technologies and are already outperforming teenagers of this generation. Medical technology has a similar evolutionary pattern. Again, as beautifully synthesized by Robinson [1], nanomachines with rotor blades on the scale of human hair are used as scrubbers to swim through veins and arteries cleaning out cholesterol and plaque deposits. Artificially grown skin cultures are already being produced, and research in the development of an organic artificial heart is taking place in several places. Neuroscience is using nanotechonology to explore the process of thoughts and perception at the molecular level. These studies are generating new approaches in psychology, in the design of drugs, and in the treatment of pain. Computers, in the form of neural implants, are already being placed into people's brains to counteract Parkinson's disease and tremors from multiple sclerosis. Cochlear implants are available to restore hearing. There have been experiments in which a completely blind patient's optic nerve fibers were connected to a computer-driven dot matrix display and the patient was able to see crude patterns [1]. The Warfighter Refractive Surgery Program in the United States—established to repair sight defects in duty Army personnel—has now moved to enhance vision beyond 20-20. Shirts could have sensors that monitor heartbeat and other vital signs. The impossible yesterday is routine today. And this revolution is not over. In fact, it has just begun.

Technological change is one driver of change, but there is another: the sheer numbers of people on the planet and the shifting patterns of population. In 1800, we were 1 billion. It took us more than a century (1930) to double and reach 2 billion people on Earth but only 30 years (1960) to become 3 billion. In 2010, we

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were 7 billion and we will be more than 8 billion in 2100. The most significant growth in population is not in the old industrial economies of Western Europe and North America. It is in the emerging economies of South America, the Middle East, and Africa. The population of the least developed countries is projected to triple by the end of the century [2]. In these countries, almost half the population is younger than 25 years. In others, especially the older industrialized countries, the population is aging. These trends do affect the epidemiology of diseases and the financial sustainability of demands for health and health care.

Population aging puts pressure on a society's ability to support its elderly citizens. A commonly used indicator of this pressure is the "elderly support ratio" calculated as the number of working age people 15 to 64 years old divided by the number of persons 65 years or older. This ratio serves as a rough indicator of the number of potential providers of support per potential elderly dependent. A decrease in the elderly support ratio indicates that in most societies an increasing number of beneficiaries of health and pension systems have to be supported by a smaller number of contributors. Such change is likely to have heavier pressure on the working-age population, whether in the form of higher taxes or other contributions, so as to maintain a stable flow of benefits to the older population. Without dramatic changes, this will no longer be sustainable in any country. But the growth of the population and the changing pattern of demographics impact not only a society's ability to sustain the increasing demand for health but also the epidemiology of diseases.

In 2010, more than one-third of the European Union's population had developed at least one chronic condition. Cardiovascular disease is the major cause of death worldwide followed by cancer and neurodegenerative diseases. As we speak, 2 billion people are at risk of cardiovascular diseases. The inescapable conclusion is that an epidemic of premature cardiovascular mortality is developing, the brunt of which will be borne by low- and middle-income countries [3].

Body mass index has increased in almost all countries, and the prevalence of obesity among adults and children is a growing concern. Overweight affects one in three adults and obesity one in nine adults in the world: a tsunami of obesity that will eventually affect all regions of the world. The proportion of daily smokers in 2009 rose to 55% in Russia, with an average proportion of 27% in Organization for Economic Cooperation and Development countries. Even though there is a general decline in the n umber of smokers, tobacco is still responsible for about 1 in 10 adult deaths worldwide, equivalent to 6 million deaths each year. If it is true that risk factors are modifiable in principle, access to care is a barrier to the effective control of risk factors and only a minority of those diagnosed with modifiable risk factors achieve target outcomes. The challenge of control is even greater in middle-income countries where diagnosis lags behind prevalence [3]. The capacity of these countries to effectively deal with the existing and projected burden of noncommunicable diseases is limited.

Chronic diseases are the big killers and the most costly. It has been estimated that the commonest chronic conditions are costing the United States more than US $1 trillion per year, which is expected to increase to US $6 trillion by the middle of the century [4]. The indirect costs of the same chronic conditions will total US $3.4 trillion in 2023, which is four times the cost of treatment. In the United Kingdom, the cost of chronic conditions such as stroke, heart diseases, diabetes, cancer, and dementia account for more than 50% of the total health care expenditure.

Yet, health care expenditure is not evenly spread across the global population. Coronary angioplasty rates per 100,000 population range from a minimum of 2 in Mexico to a maximum of nearly 600 in Germany [5]. The prevalence of patients undergoing dialysis varies from 19 per 100,000 population in Iceland till nearly 200 in Japan [5]. Anticholesterol drug consumption in terms of defined daily dose per 1000 population per day ranges from 21 in Estonia to 126 in Australia [5]. The usage of oncology drugs for breast cancer in 2007, expressed as sales in mg/100,000 inhabitants in E13 and 24 European countries, varies from 2000 mg/100,000 population in Romania to nearly 25,000 mg/100,000 in Switzerland [6]. Although these are crude indicators of access to care, we cannot keep accepting such a huge inequity. Without universal access to care, well-integrated health services, an efficient decision-making process for the allocation of available resources, strong leadership in public health, and decisive commitment by all stakeholders, including the ones that are not formally part of the health care sector but do benefit from its performance, the responses to these challenges would be wholly inadequate.

The simple fact is that these are times of unprecedented global changes. And these changes are accelerating. And we cannot say how. What we know is that the population will continue to grow to unprecedented levels. We know that technology will open new frontiers and that these technologies will manifest with stunning velocity. We do know that the combination of these factors make access to care a privilege even for the older industrialized economies. Changes of this caliber are never linear and rarely predictable. It was probably with this in mind that the economist JK Galbraith said, "The primary purpose of economic forecasting is to make astrology look respectable."

If it is true that we may not be able to predict the future but we can help to shape it. And here education has a role to play. Although the recent years have seen a steep increase in the offerings of postgraduate management education programs in health and health care, the majority of these programs are still traditionally conceived and designed, aiming to train students to deal with specific, domestic, current problems. With the promise of making students the best specialists on Earth, to get the highest return on his or her investment in education, the performance of these programs is often measured in terms of earnings maximization. Although an indicator of success, this often incentivizes individuals to be context-based, individualistic, shortsighted, and self-focused.

We are living in times of revolution, and if we are to survive and flourish we have to think differently. In times of revolution, we need "revolutionary ideas." If we keep relying on current paradigms to answer already too-far-ahead complex problems, we will fail. We have to be imaginative. The power of imagination is the power to see beyond the present moment and our immediate environment. Our extraordinary capacity for imagination has given rise to the most far-reaching examples of human achievements and has taken us from caves to cities and from superstition to science. We have seen far but not far enough. We still think narrowly and too closely about ourselves as individuals and too little about the consequences of our actions. There is a tendency toward "short-termism." Ironically, these pressures arise in response to the very processes of change that require a longer-term view. Robinson [1] points that as organizations compete in more aggressive markets, budgets for experimental research, blue-sky thinking, and long-range development are being cut back in the interest of immediate returns. The effect can be to stifle the very sources of creativity on which long-term success ultimately depends.

Given the challenges we face, education needs to foster imagination and creativity [1]. The key of this transformation is not to standardize education but to personalize it, to build achievement on discovering the individual talents of each student [1]. But individual creativity is almost always stimulated by the work, ideas, and achievements of other people. The quality of what is done depends on this process of interweaving, of making fresh connections, of breaking with convention, and seeing

from different perspectives. More often than not, creativity in organizations is driven by teams, where there is a flow of ideas between people who have different areas of expertise. Diversity is a powerful resource for creative teams. Education has the role to leverage diversity because what future managers, leaders, and health professionals are likely to deal with is a diverse society where age, gender, race, and religions are not homogeneously clustered any longer, but will mingle with the crowd, expressing similar needs but demanding different services. As Robinson [1] says, transforming education is not easy but the price of failure is more than we can afford, while the benefits of success are more than we can imagine.

After 13 years from its inception, the Master in International Healthcare Management, Economics and Policy has graduated more than 400 students from more than 70 countries scattered across the globe. It is international because it believes in diversity as the most powerful engine to turn on imagination, creativity, and innovation. It is international because it takes lessons from all over the world but does not take any of these as the only right lesson. It is challenging because it questions what we believe and pushes students beyond the cutting edge. It is comprehensive because it thinks that no one discipline can serve to answer all questions. It builds on teamwork and "out-of-the box" thoughts to stimulate imagination and creativity. It gave birth to an exciting network of persons who share the same strong commitment, passion, and belief for something they were born to, who did not pursue their passion simply because of the promise of a paycheck. They pursued them because they could not imagine doing anything else with their lives.

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